

Glasgow Coma Scale Training Exercise

By:

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Level of consciousness is an important predictor of traumatic brain injury (TBI). This can be measured with the Glasgow Coma Scale (GCS) which is the most widely used method for reporting serial neurologic examinations. Traditional teaching methods for this examination have been to show people the GCS chart, discuss the components, and then move onto the next topic. EMTs are then left to figure out how to use the scale when they are faced with head injured patients. On ambulance calls where the EMTs are treating patients with head injured patients, the GCS is frequently calculated at the hospital, after the call, instead of being calculated on the call to help determine the most effective treatments or course of action.

These Glasgow Coma Scale training exercises can be used during an initial or refresher EMT class, during Paramedic training, or for a Continuing Medical Education (CME) activity. This activity works well if there are small groups of four to five participants. Each participant gets two or three scenarios to act out. One person acts as the victim, another acts as the rescuer, while the remaining members of the group watch and calculate the GCS quietly to themselves. The score is announced and discussion occurs if anyone gets an answer that differs from the card. Each scenario should take only a few minutes to complete.

This is a fun and easy method for EMT students, EMTs, and MICPs to become more comfortable with the Glasgow Coma Scale.

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Have the Coma Scale visible, either on the blackboard or a chart taped to the wall. Allow the students to consult as they calculate the score.

The scripts are arranged in an order that should be convenient, but there's no reason they have to be done in sequence.

Teaching points: Fully oriented, etc. Review the maximums for each section: 4, 5, and 6. Review the "standard" questions (if not already done) such as, "can you tell me the month and year?"

PATIENT **1**

You will have your eyes open and look at the person who is examining you.
(4)

You will speak normally and answer questions appropriately
(5)

You will be able to follow commands like, "show me two fingers."
(6)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 15

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Have the Coma Scale visible, either on the blackboard or a chart taped to the wall. Allow the students to consult as they calculate the score.

Teaching points: Missing only one point, for orientation.

PATIENT **2**

You will have your eyes open and look at the person who is examining you.
(4)

You will speak normally, but you are confused. You don't know exactly what happened to you, and you give the wrong month when asked.
(4)

You will be slow to follow commands like, "show me two fingers," but you will be able to do so.
(6)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 14

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Have the Coma Scale visible, either on the blackboard or a chart taped to the wall. Allow the students to consult as they calculate the score.

Teaching points: Completely unresponsive patients still manage a 3 on the GCS. Go figure. Also review (if not already done) what is acceptable (and practical) for a noxious stimulus: The Brain Trauma Foundation recommends two: armpit pinch and nailbed pressure. Others use sternal rub, pinching the webbing between fingers, pulling leg hair, trapezius pinch. The earlobe pinch, used by many, is out of favor with prehospital providers because it may cause a patient (whose C-spine is not cleared) to try to move his head.

PATIENT **3**

Your eyes will be closed, even if someone pinches you.
(1)

You will make no sound, even if someone pinches you.
(1)

You will not follow commands. You will not move, even if someone pinches you.
(1)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 3

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Have the Coma Scale visible, either on the blackboard or a chart taped to the wall. Allow the students to consult as they calculate the score.

Teaching points: Pretty straightforward. A score of 5 on the motor section is obtained either by localizing pain or by purposeful movement.

PATIENT **4**

You will keep your eyes closed, even if someone pinches you.
(1)

You will groan in response to being pinched, but you will not say any recognizable words.
(2)

You will not follow commands, but if someone pinches you, you will try to push his or her hand away.
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 8

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Have the Coma Scale visible, either on the blackboard or a chart taped to the wall. Allow the students to consult as they calculate the score.

Teaching points: Some students miss the eye response to pain; they simply aren't looking at the eyes when they do the pinch. Emphasize the need to watch the eyes as well as the motor response to pain

Also: although "Don't" and "Stop" are not exactly *inappropriate* under the circumstances (getting pinched) this patient still isn't answering any questions or speaking in whole sentences. He or she still rates a 4 on the verbal section, and "inappropriate words" may not be the best term, because it is too general. "Disconnected words," or "non-sentences" may be better.

PATIENT 5

Your eyes will be closed, even if someone calls you loudly. You will open them if pinched.
(2)

You will say, "Don't!" or "Stop!" when pinched, but do not speak any whole sentences and do not answer any questions
(4)

You will not follow commands, but if someone pinches you, you will quickly push his or her hand away.
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 11

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Have the Coma Scale visible, either on the blackboard or a chart taped to the wall. Allow the students to consult as they calculate the score.

Teaching points: Lights are on, but nobody's home. Some patients won't follow commands, but definitely have enough going on in their brains to try to unbuckle straps or tear out IVs. Grabbing hold of the examiner's hands is similarly purposeful movement but not reasoned.

Also note: same score as Patient 5 (GCS = 11) but with different responses. Sometimes it's helpful to report the patient's in each category.

PATIENT 6

Your eyes will be open and you will be looking around you with an anxious expression on your face.

(4)

You will not answer questions at all. If pinched you will groan, but not say any recognizable words.

(2)

You will not follow commands, but if someone touches you (including to pinch you) you will grab hold of his or her hand with both of yours. Don't let go easily.

(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 11

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Have the Coma Scale visible, either on the blackboard or a chart taped to the wall. Allow the students to consult as they calculate the score.

Teaching points: One thing to be cautious about: when your noxious stimulus is a sternal rub, and the patient brings his or her arms up toward your hand, is that localizing pain or is that decorticate (flexion) posturing? A solution is to repeat with a different painful stimulus, like nailbed pressure.

PATIENT **7**

Your eyes will be closed, even if someone pinches you.
(1)

You will make no sound, even if someone pinches you.
(1)

You will not follow commands. If someone pinches you, bring your closed fists up to lie beside one another at the top of your sternum (decorticate posturing)
(3)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 5

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Have the Coma Scale visible, either on the blackboard or a chart taped to the wall. Allow the students to consult as they calculate the score.

Teaching points: It's possible to miss this patient's responses if the student doesn't call loudly enough.

PATIENT **8**

Your eyes will be closed, but you will open them briefly if anyone calls loudly.
(3)

You will not answer questions. If anyone pinches you, you will groan or yell, but not say any recognizable words
(2)

You will not follow commands, but if someone pinches you, you will quickly push his or her hand away.
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 10

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Before this scenario, take down the chart from the wall, or erase it from the board. After eight repetitions it's time to try it unaided.

Teaching points: Straightforward scenario, but the students may need some help at first with the numbers. Help them run down the maximum possible scores for each section (4, 5, and 6) and figure how many points to take off.

PATIENT **9**

Your eyes will be closed, but you will open them if someone speaks to you.
(3)

You will speak normally, but you are confused. You don't remember exactly what happened to you, and you give the wrong month if asked.
(4)

You will be slow to follow commands like, "show me two fingers," but you will be able to do so.
(6)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 13

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Do not have the GCS scoring chart visible for this scenario.

Teaching points: Depending on where the pain is, it may or may not be easy to do a convincing "withdrawal." How do you *withdraw* from a sternal rub?

PATIENT **10**

Your eyes will be closed, even if someone pinches you.
(1)

The only sound you make will be a weak groan when someone pinches you.
(2)

You will not follow commands, but if someone pinches you, you will try to pull away or turn away from the pain.
(4)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 7

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Do not have the GCS scoring chart visible for this scenario.

Teaching points: No eye opening, but it's not because the patient is deeply unconscious. In other cases (facial trauma) the eyes may be swollen shut. How do you document this to keep the score from being misleading? Maybe a brief explanation in parenthesis.

PATIENT **11**

Your eyes will be closed, even if someone talks to you or pinches you.
(1)

You will answer questions correctly. Mention that your head hurts. If anyone asks you to open your eyes, refuse and say "the light makes my head hurt really bad."
(5)

Follow commands appropriately, but don't open your eyes.
(6)

THIS PATIENT HAS A GCS SCORE OF 12 (oriented but cannot open eyes due to pain)

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Do not have the GCS scoring chart visible for this scenario.

Teaching points: Do you think "Leave me alone," and "what are you doing?" deserve to be a full point higher than "stop" and "don't " or such? Does he or she merit a 4 on verbal for those? How about for "I don't know" in response to questions ? Did the student try to ask a question during the brief period of wakefulness?

PATIENT **12**

Your eyes will be closed, but you will open them if anyone pinches you.
(2)

Your speech will be fairly clear when you are aroused by a painful stimulus, such as a pinch, but you will only say, "leave me alone" or "what are you doing?" and soon go back to sleep. If someone asks you a question while you are still awake, you'll say, "I don't know," and go back to sleep.
(4)

You will not follow commands, but if someone pinches you, you will quickly push his or her hand away.
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 11

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Do not have the GCS scoring chart visible for this scenario.

Teaching points: An important point: sometimes withdrawing from a painful stimulus is quite appropriate. It's what I'd do if someone were pinching my hand. But if it's a sternal rub or an armpit pinch, or if the person hangs on so I can't withdraw, then I'll try something else, like pushing the person's hand away.

PATIENT **13**

Your eyes will be open.
(4)

Your speech won't make much sense. In answer to a question like, "what month is this?" you will say something like, "he, umm, he . . . My jacket. I don't . . ."
(3)

You will not follow commands, but if someone pinches you, jerk your hand away. If you can't pull away, then quickly push his or her hand away.
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 12

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Do not have the GCS scoring chart visible for this scenario.

Teaching points: An important point: when we mimic decerebrate (or even decorticate) posturing in drills, we always want people to catch it, so we tend to exaggerate it to the point where the patient is rigid and quivering. It looks more like a seizure than like true posturing. Posturing *can* be dramatic, but usually is no more than the person assuming a particular position when stimulated. It's easy to miss if one is not looking for it. This is especially true when we position the patient's arms at his or her sides (like for backboarding?), and decerebrate posturing develops subsequently.

PATIENT **14**

Your eyes will be closed, even if someone pinches you.
(1)

You will not make any sound, even if someone pinches you.
(1)

You will not follow commands. If someone pinches you, put your arms rigidly at your side (decerebrate posturing).
(2)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 4

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Do not have the GCS scoring chart visible for this scenario.

Teaching points: The verbal score is arguable. The patient is speaking in complete sentences (disoriented?) but not appropriate ones. Definitely not answering the questions asked (inappropriate words?). Probably this rates a 3 for verbal, but further explanation of the patient's response will make the report more complete.

PATIENT **15**

Your eyes will be closed, even if someone pinches you.
(1)

You will keep repeating some meaningless phrase like, "I want my bunny slippers, I want my bunny slippers, I want . . ." Keep it up continually, and if someone pinches you, just say it louder.
(3)

You will sit up and rock continually. You will not follow commands. If someone pinches you, push or slap the hand away
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 9

GLASGOW COMA SCALE SCORING EXERCISE

INSTRUCTOR NOTES

Do not have the GCS scoring chart visible for this scenario.

Teaching points: Straightforward.

PATIENT **16**

Your eyes will be closed at first, but you will open them if someone calls you loudly.

(3)

You will not say any recognizable words. If someone asks you a question, look confused and say, "mmm ? " without opening your mouth.

(2)

You will not follow commands. If someone pinches you, pull away.

(4)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 9

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **1**

You will have your eyes open and look at the person who is examining you.
(4)

You will speak normally and answer questions appropriately
(5)

You will be able to follow commands like, "show me two fingers."
(6)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 15

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT 2

You will have your eyes open and look at the person who is examining you.
(4)

You will speak normally, but you are confused. You don't know exactly what happened to you, and you give the wrong month when asked.
(4)

You will be slow to follow commands like, "show me two fingers," but you will be able to do so.
(6)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 14

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **3**

Your eyes will be closed, even if someone pinches you.
(1)

You will make no sound, even if someone pinches you.
(1)

You will not follow commands. You will not move, even if someone pinches you.
(1)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 3

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **4**

You will keep your eyes closed, even if someone pinches you.
(1)

You will groan in response to being pinched, but you will not say any recognizable words.
(2)

You will not follow commands, but if someone pinches you, you will try to push his or her hand away.
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 8

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **5**

Your eyes will be closed, even if someone calls you loudly. You will open them if pinched.
(2)

You will say, "Don't!" or "Stop!" when pinched, but do not speak any whole sentences and do not answer any questions
(4)

You will not follow commands, but if someone pinches you, you will quickly push his or her hand away.
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 11

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **6**

Your eyes will be open and you will be looking around you with an anxious expression on your face.

(4)

You will not answer questions at all. If pinched you will groan, but not say any recognizable words.

(2)

You will not follow commands, but if someone touches you (including to pinch you) you will grab hold of his or her hand with both of yours. Don't let go easily.

(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 11

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **7**

Your eyes will be closed, even if someone pinches you.
(1)

You will make no sound, even if someone pinches you.
(1)

You will not follow commands. If someone pinches you, bring your closed fists up to lie beside one another at the top of your sternum (decorticate posturing)
(3)

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GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **8**

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You will not follow commands, but if someone pinches you, you will quickly push his or her hand away.
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 10

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT 9

Your eyes will be closed, but you will open them if someone speaks to you.
(3)

You will speak normally, but you are confused. You don't remember exactly what happened to you, and you give the wrong month if asked.
(4)

You will be slow to follow commands like, "show me two fingers," but you will be able to do so.
(6)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 13

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **10**

Your eyes will be closed, even if someone pinches you.
(1)

The only sound you make will be a weak groan when someone pinches you.
(2)

You will not follow commands, but if someone pinches you, you will try to pull away or turn away from the pain.
(4)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 7

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **11**

Your eyes will be closed, even if someone talks to you or pinches you.
(1)

You will answer questions correctly. Mention that your head hurts. If anyone asks you to open your eyes, refuse and say "the light makes my head hurt really bad."
(5)

Follow commands appropriately, but don't open your eyes.
(6)

THIS PATIENT HAS A GCS SCORE OF 12 (oriented but cannot open eyes due to pain)

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

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Your eyes will be closed, but you will open them if anyone pinches you.
(2)

Your speech will be fairly clear when you are aroused by a painful stimulus, such as a pinch, but you will only say, "leave me alone" or "what are you doing?" and soon go back to sleep. If someone asks you a question while you are still awake, you'll say, "I don't know," and go back to sleep.
(4)

You will not follow commands, but if someone pinches you, you will quickly push his or her hand away.
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 11

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **13**

Your eyes will be open.
(4)

Your speech won't make much sense. In answer to a question like, "what month is this?" you will say something like, "he, umm, he . . . My jacket. I don't . . ."
(3)

You will be not follow commands, but if someone pinches you, jerk your hand away. If you can't pull away, then you will quickly push his or her hand away.
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 12

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **14**

Your eyes will be closed, even if someone pinches you.
(1)

You will not make any sound, even if someone pinches you.
(1)

You will not follow commands. If someone pinches you, put your arms rigidly at your side (decerebrate posturing).
(2)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 4

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **15**

Your eyes will be closed, even if someone pinches you.
(1)

You will keep repeating some meaningless phrase like, "I want my bunny slippers, I want my bunny slippers, I want . . ." Keep it up continually, and if someone pinches you, just say it louder.
(3)

You will sit up and rock continually. You will not follow commands. If someone pinches you, push or slap the hand away
(5)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 9

GLASGOW COMA SCALE SCORING EXERCISE

STUDENT SCRIPT

PATIENT **16**

Your eyes will be closed at first, but you will open them if someone calls you loudly.

(3)

You will not say any recognizable words. If someone asks you a question, look confused and say, "mmm ? " without opening your mouth.

(2)

You will not follow commands. If someone pinches you, pull away.

(4)

THIS PATIENT HAS A GLASGOW COMA SCORE OF 9